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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/703,977	11/07/2003	Carlos R. Corleto	COS-928	2841
25264	7590	09/04/2007	EXAMINER	
FINA TECHNOLOGY INC			AFZALI, SARANG	
PO BOX 674412			ART UNIT	PAPER NUMBER
HOUSTON, TX 77267-4412			3726	
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09/04/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/703,977	CORLETO ET AL.
	Examiner	Art Unit
	Sarang Afzali	3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on RCE filed on 8/16/2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-53 is/are pending in the application.  
 4a) Of the above claim(s) 52 and 53 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-51 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 07 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/16/2007 has been entered.

### ***Response to Amendment***

2. The applicant's amendment filed on 8/16/2007 has been fully considered and made of record.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 26-28, 50, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 64-47878 (hereinafter '878).

'878 teaches a method comprising: by perforating 2 a steel plate 1, forming a devolatilizer nozzle from the steel plate (figure 1), and heat treating the devolatilizer

nozzle (English abstract, line 3). In as much structure claimed, the nozzle of '878 is considered a "devolatilizer nozzle". Heat treating increases the yield strength and tensile strength of steel. '878 teaches that a volatile component (reaction gas in the CVD device, paragraph [20], lines 1-6 and Fig. 2) and highly corrosive solution (paragraph [02], lines 1-4) pass through the perforations in the nozzle. The Examiner considers that both the gas and highly corrosive solution are considered "volatile" components considering that they are hard to hold and capture (Attached online dictionary, definition #5).

Regarding the limitations pertaining to the capacity of the nozzle, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Furthermore, the limitations pertaining to the capacity of the nozzle does not further limit the method of forming the nozzle.

5. Claims 4-15, 19-21, 23-25, 29-40, and 44-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over '878.

'878 teaches the invention cited above with the exception of specifically disclosing the claimed yield strength and tensile strength of the steel material used, the claimed sizes of holes, and the thickness of the plate.

At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used the claimed yield and tensile

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strength, the claimed sizes of holes, and the thickness of the plate because applicant has not disclosed that claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either the yield and tensile strength, the claimed sizes of holes, and the thickness of the plate taught by '878 or the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate because either yield and tensile strengths, the claimed sizes of holes, and the thickness of the plate perform the same function of providing a high strength nozzle equally well.

Since applicant did not traverse the examiner's assertion of Official Notice that using the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate are well-known in the art, such assertion is taken to be admitted prior art. It would have been obvious to have provided the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate, in order to provide a nozzle having the desired strength requirements depending upon the application the nozzle is used for.

Furthermore, the particular steel used is considered an obvious matter of design choice depending upon the application that the nozzle is to be used for and since applicant did not traverse the examiner's assertion of Official Notice that using the claimed steel composition is well-known in the art, such assertion is taken to be

admitted prior art. It would have been obvious to have provided the claimed steel composition, in order to provide a high strength steel material for the nozzle.

6. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over '878 in view of Nakagawa et al. (US6007761).

'878 teaches the invention cited above with the exception of annealing the steel plate. Nakagawa et al. teach annealing a steel plate (col. 8, lines 13-17).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of '878 with annealing the steel plate, in light of the teachings of Nakagawa et al., in order to strengthen the steel material prior to further processing operations.

#### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-21 and 23-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art [hereinafter APA] in view of '878.

APA teaches that devolatilizer nozzles are known to have perforations or holes and that small nozzle diameter holes are desirable because they increase devolatilization. In addition it is known to use steel for these nozzles (see paragraphs

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[0005]-[0008] of applicants specification). Furthermore, it is known that devolatilizer nozzle is used to pass a volatile component through its perforations.

However, APA does not specifically disclose heat-treating the nozzle.

'878 teaches a method comprising: perforating 2 a steel plate 1, forming a devolatilizer nozzle from the steel plate (figure 1), and heat treating the devolatilizer nozzle (English abstract, line 3). Note that the heat treating increases the yield strength and tensile strength of steel.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of APA with heat treating the nozzle, in light of the teachings of '878, in order to strengthen the material of the nozzle.

At the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate because applicant has not disclosed that claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with either the yield and tensile strength, the claimed sizes of holes, and the thickness of the plate taught by '878 or the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate because either yield and tensile strengths, the claimed sizes of holes, and the thickness of the plate perform the same function of providing a high strength nozzle equally well.

Since applicant did not traverse the examiner's assertion of Official Notice that using the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate are well-known in the art, such assertion is taken to be admitted prior art. It would have been obvious to have provided the claimed yield and tensile strength, the claimed sizes of holes, and the thickness of the plate, in order to provide a nozzle having the desired strength requirements depending upon the application the nozzle is used for.

Furthermore, the particular steel used is considered an obvious matter of design choice depending upon the application that the nozzle is to be used for and since applicant did not traverse the examiner's assertion of Official Notice that using the claimed steel composition is well-known in the art, such assertion is taken to be admitted prior art. It would have been obvious to have provided the claimed steel composition, in order to provide a high strength steel material for the nozzle.

The claimed number of perforations is considered an obvious matter of design choice to a person of ordinary skill in the art, at the time of the invention, depending upon the desired devolatilization required.

9. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over APA in view of '878 as applied to claim 1 above, and further in view of Nakagawa et al.

APA/878 teaches the invention cited above with the exception of annealing the steel plate.

Nakagawa et al. teach annealing a steel plate (col. 8, lines 13-17).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of APA/878 with annealing the steel plate, in light of the teachings of Nakagawa et al., in order to strengthen the steel material prior to further processing operations

***Response to Arguments***

10. Applicant's arguments filed 8/16/2007 have been fully considered but they are not persuasive.

Applicant's main arguments, under "Remarks", page 1, are that "878 does not teach, show or suggest forming a devolatilizer nozzle, as recited in the pending claims. In particular, Applicants submit that '878 does not teach, show or suggest a method of reducing the volatile content of polymers by passing a volatile component through the perforations in the devolatilizer nozzle, as recited in amended claim 1. Therefore, Applicants respectfully request withdrawal of the rejections."

The Examiner respectfully disagrees with the above arguments. Note that '878 teaches a method of forming a devolatilizer nozzle from the steel plate (Fig. 1) by perforating the steel plate, forming nozzle from said plate, heat treating the nozzle and passing a volatile component through the perforations (both in the CVD device and highly corrosive solution discharged at high speeds during the spinning operation).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., reducing the volatile content of polymers by passing a volatile component through

the perforations in the devolatilizer nozzle) are not recited in the rejected claim(s).

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument pertaining to "passing a volatile component through the perforations in the devolatilizer nozzle", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim and as such the structure of '878 is capable of performing the intended use of the claimed invention.

In response to applicant's argument that "Applicants respectfully traverse that paragraphs 5-8 of the instant specification are admitted prior art", the Examiner requests the Applicant to clarify what parts of the Applicant's disclosure (paragraphs 5-8) are considered as Applicant's invention and what parts are well-known in the art.

As for the secondary reference, since the Applicant has not provided any detailed argument, the Examiner still relies on Nakagawa to teach the deficiencies of the primary references '878 and Applicant's Admitted Prior Art.

### ***Conclusion***

11. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the

grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SA  
8/29/2007



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8/29/07